Understanding Australian Real Estate Agent Perspectives in Promoting Sustainability Features in the Residential Property Market

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Abstract

Problem - There is little evidence that over the past 20 years real estate agents in Australia are taking initiative in promoting sustainability features in the property purchase selection phase.

Methodology/Approach - Residential real estate agents are selected as they are the conduit of information between sellers and buyers, having an important role in communicating the importance of sustainability features in housing. A questionnaire was distributed through a newsletter alert from the Real Estate Institute of Queensland (REIQ) and an Australia-wide residential real estate company, PRDnationwide. This questionnaire asked agents to rate the relative importance of 50 building information of housing.

Results - Real estate agents considered more on spatial planning category, which focuses on general housing features, as opposed to other categories which are more related to sustainability.

Discussion - This study provides an insight into the agents' perspectives on sustainability features that will enhance the effectiveness of sustainability "marketing" in the residential property sector.

Implications – The attitude of agents not actively promoting sustainability features may affect potential sellers/buyers not realising the importance of choosing a home with sustainability features.

Originality - The majority of the studies examine the impact of sustainability features on property value, ignoring the role of real estate agents. This study adds to the importance of assessing agents' perspectives that may assist in the decision making process of purchasing a house.

Keywords - sustainability features, real estate agents, residential property

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1. Introduction

The triple bottom line concept argues that sustainability can only be achieved by balancing the environmental, social and economic performance (Carter & Rogers, 2008). Birkeland (2008) argued that a fourth element of 'governance' should be included to enhance sustainable development. Different countries such as Germany and Australia have introduced sustainability features into their building codes to 'improve' the design, construction and operation of houses (Dong & Wilkinson, 2007). Consumers can view government's building code in the aspects of effectiveness and cost efficiency (Dumm, Sirmans, & Smersh, 2012). In the review of Australian National Construction Code (NCC), there are numerous issues of non-compliance with the regulated energy performance requirements and lack of best practice in the Australian residential property industry. Responsibility for poor industry performance was not attributed to any particular sector, but to the multiple failures in all sectors, contributing to a culture of poor performance (State of South Australia, 2014).

To ensure that sustainability features are being covered in the property purchase selection phase, real estate agents play an important role in passing on information regarding these features to potential buyers in advertised property descriptions (Ball & Wiley, 2006). Investigations have been carried out on the impact of real estate agents' negative comments on the selling price (Haag, Rutherford, & Thomson, 2000) and the impact of specific words in the property description on marketing outcomes (Goodwin, Waller, & Weeks, 2014). A main issue is the varying number of features within a residential property, which mean that agents may not have the opportunity to include all features and/or neglect some of these features. There is a need to investigate the perspectives of real estate agents on different pieces of building information of housing to narrow the housing features and create a list that is meaningful to the real estate agents.

Limited research has been carried out with regards to the perspective of real estate agents on different housing features. This paper specifically investigates the perspectives of Australian real estate agents on different sustainability features of residential property. An online questionnaire was distributed to real estate agents. This provides an insight into the agents' perspectives on sustainability features that will enhance the effectiveness of sustainability "marketing" in the residential property sector.

2. Literature Review

Sustainable housing was labelled with different terms such as "green" (Schmidt, 2008), which may provide an impression that sustainability is only related to environmental issues. However, sustainable housing should encompass at least three components of environment, economics and ecology (Birkeland, 2008). Housing sustainability should highlight a positive concept that enables the occupants to have better quality of life and reduce the consumption cost. Research has shown the positive impact of green values in the residential property (Aroul & Hansz, 2012; Cajias & Piazolo, 2013). However, there is little evidence that over the past 20 years the residential property sector in Australia is taking initiative in promoting sustainability in the property purchase selection phase (Cutting, Cahoon, & Hall, 2012). In the housing market, the most important criteria for choosing a house is location and the value to pay for it (Whipple, 2006). There is less concern about sustainability features although regulations signify the need to take sustainability into consideration for the decision making process (Dent, Patrick, & Ye, 2012).

Incorporating sustainability into the decision making process of purchasing a house requires the help of real estate agents, as they are the conduit of information flow between sellers and buyers to ensure the efficiency and effectiveness of bringing both parties together (Ball & Wiley, 2006; Smith, 2012). Germany's Sustainable Building Quality Label, informed by research on building performance, property valuation and sustainability, has identified 60 sustainability features, describing buildings in six main topics: economical quality, ecological quality, technical quality, social-cultural and functional quality, location quality, and process quality (Bock, Linner, &

Hartmann, 2010; Lützkendorf & Lorenz, 2011). A research project "Strategies and Solutions for Housing Sustainability" identified approximately 150 building information for residential property. This list was condensed to 45 information that were then classified into the five categories: spatial planning, occupant health and safety, occupant comfort, operation and services, and building durability, by taking into consideration of Germany's Sustainable Building Quality Label (Miller, Stenton, Worsley, & Wuersching, 2014).

The real estate company LJ Hooker introduced The 17 Things™, which form the basis for a new checklist for sustainable housing design and construction. These 17 elements are climate zone, living locally, orientation, cross-ventilation, zoning, insulation, density of building materials, windows (glazing), shading or sun control, efficient heating and cooling devices, energy efficient lighting, efficient hot water system, solar photovoltaic system, low water garden, water efficiency devices, rainwater tanks, and energy rating. These 17 elements are grouped into five areas, which are location, floor plan and layout, key building structure elements, important energy and water saving inclusions, and energy rating (LJ Hooker, 2014). To get this certification on the property listings, the property needs to achieve six out of seventeen elements.

All of the housing features discussed in both research project "Strategies and solutions for Housing Sustainability" and The 17 Things are important for the development of a list of sustainability features that could be useful for the residential property market. These studies provided an important indication on the sustainability features which can be further explored in residential property. However, there is no established theoretical framework which can help to justify the outcomes of the sustainability features. As potential buyers refer to the advertised property descriptions in making their purchasing decision, the property descriptions listed by real estate agents will affect the buyers' decision in the property purchase selection phase (Goodwin et al., 2014). Therefore, it is worth investigating real estate agents' perspectives about different sustainability features to ensure that they can assist in "marketing" sustainability in the property sector and assist in the buyers' decision making of purchasing a house.

3. Research Methodology

This paper investigates the perspectives of Australian real estate agents in promoting sustainability features in residential property during the property purchase selection phase. Residential real estate agents are selected as they are the conduit of information between sellers and buyers, and communicate the importance of different housing features.

An online questionnaire was created by using an online survey creation tool, Key Survey, with 265 records clicked on the survey link. This survey was distributed to real estate agents, mortgage brokers and property valuers in Australia. This paper will focus on the discussion of real estate agents. This questionnaire was distributed through a newsletter alert from the Real Estate Institute of Queensland (REIQ) and an Australian wide residential real estate company, PRDnationwide, from September to December 2015. As the questionnaire was distributed through the internal newsletter alert to the members of REIQ and PRDnationwide, tracking the number of agents reached by this alert was not possible. By combining the housing features listed in the LJ Hooker The 17 Things and research project "Strategies and Solutions for Housing Sustainability", this questionnaire created 50 pieces of building information of housing (refer to Table 1).

Table 1: 50 Building information being tested in questionnaire

Category	Code	Building information of housing
Spatial planning	S1	Site area
	S2	House size
	S3	Site coverage
	S4	Zoning/land use
	S5	Number of bedrooms/bathrooms
	S6	Size of rooms
	S7	Ceiling height
	S8	Internal room layout and connections
	S9	Access to personal modes of transport
	S10	Access to public modes of transport
Occupants health and safety	H1	Indoor air quality
	H2	Accessibility - wide doorway
	H3	Accessibility - accessible ramps
	H4	Durability of building material
	H5	Visual access to neighbours/streets
	H6	Security system
	H7	Smoke alarms
	H8	Pest control measures
	H9	Building materials (e.g. concrete, masonry, brick)
	H10	Hot water temperature regulators
Occu-pants' comfort	C1	Annual thermal comfort- star rating
	C2	Insulation (wall, floor, roof and ceiling)
	C3	Building orientation
	C4	Cross-flow ventilation
	C5	Location of ceiling fans
	C6	Type of hot water unit
	C7	Sealing on windows and doors
	C8	Shading/sun control
	C9	Acoustic comfort
	C10	Visual comfort/scenic view
Operation and services	O1	Type of energy services connections (gas/electricity)
	O2	Type of communication/data services connections (fax/phone coverage)
	O3	Water services connections (mains supply/rainwater/recycled water)
	O4	Connection to watertank
	O5	Hot water service storage capacities (litres)
	O6	Alternative power systems
	O7	Size of solar photovoltaic (PV) panel
	O8	Battery storage capacity for solar photovoltaic (PV) panel
	O9	Energy efficient lighting
	O10	Water usage of dishwasher
Building durability	B1	Accessible bathroom/toilet
	B2	Flexible layout (i.e. use of rooms for different purposes)
	B3	Ability to adapt to changing needs over time
	B4	Reusable building materials
	B5	Non-toxic building materials
	B6	Recyclable building materials
	B7	Building envelope construction materials - lifespan and durability
	B8	General interior fit out materials – lifespan and durability
	B9	Kitchen/bathroom materials – lifespan and durability
	B10	Ease of access to service wiring, plumbing and data cabling

The questionnaire was comprised of four sections: (1) rating of building information importance, (2) general opinions on sustainable housing, (3) demographic details and (4) further comments. The main questions under "Rating of building information importance" were designed using a five-point Likert scale from "1" (Not at all important) to "5" (Extremely important). The agents were asked to

rate the relative importance of 50 pieces of building information of housing. These 50 features were classified into five categories (with 10 each category): spatial planning, occupants' health and safety, occupants comfort, operation and services, and building durability.

The validity of the questionnaire response was measured based on the principle that the first and second sections of the questionnaire were being answered. The following questionnaire results will form the basis of on-going research that will develop a model for more effective gathering and distributing of information on sustainability features from real estate agents to potential buyers.

4. Results and Discussions

Forty-seven real estate agents participated in this questionnaire, with 63.8% of respondents having more than 10 years working experience as real estate agents. This questionnaire covered major states in Australia, including New South Wales, South Australia, Victoria, and Queensland.

The level of understanding on the meaning of sustainable housing may affect the respondents' analysing skill on the interest from potential buyers/sellers on sustainability features in a property. The questionnaire results showed that 65.2% of the respondents believed there is little growing interest from their clients on sustainability features and among these respondents, and more than 50% believed they had quite substantial understanding on the meaning of sustainable housing. This indicated that sustainable housing is starting to gain interest from both the real estate agents and the buyers.

The respondents were asked to rate their opinion on Likert scale statements, from "1" being strongly disagree to "5" being strongly agree. Figure 1 shows the agreeability of the respondents towards the statement – "Apart from location and price, three main housing features sought by home buyers are number of bedrooms, bathrooms and car spaces."

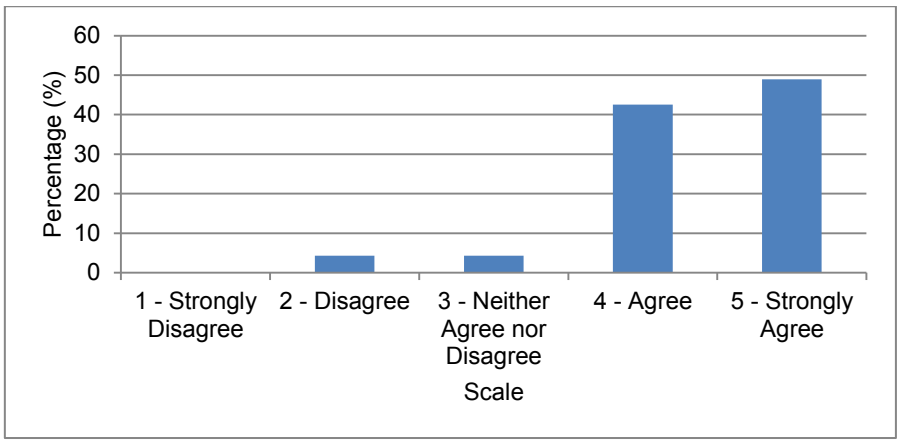

Figure 1: Agreeability of the participants towards the housing features that are highly sought by home buyers

Figure 1 illustrates that most of the real estate agents agreed and strongly agreed that home buyers are seeking and prioritising features such as: number of bedrooms, bathrooms and car spaces apart from location and price. This indicated that the current residential property market is focusing on the general property features.

The focus of home buyers on the general property features may lead to the lack of focus on sustainability features. Figure 2 shows the agreeability of respondents towards the attitude of home buyers and home renters in relation to sustainability features.

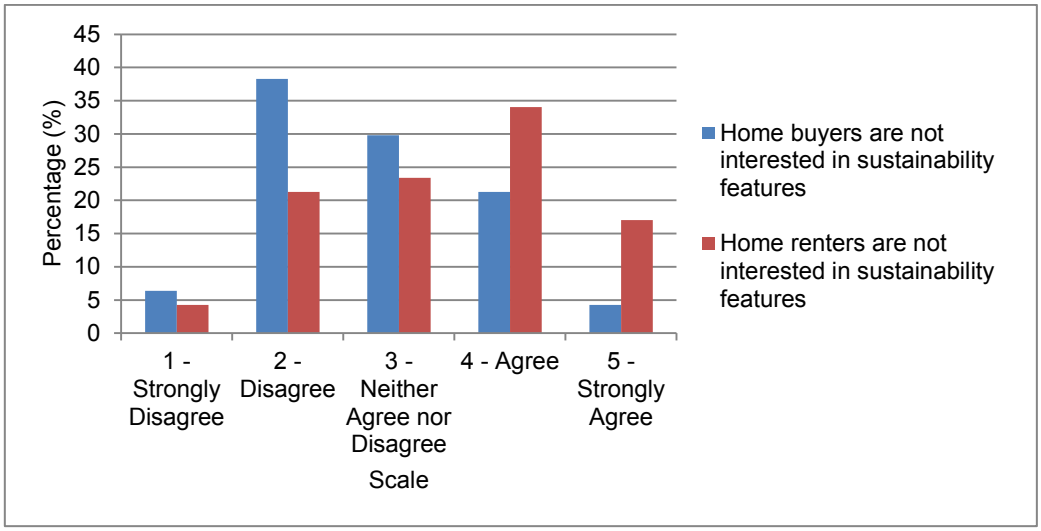

Figure 2: Agreeability of the participants towards sustainability features sought by home buyers and home renters

Figure 2 shows that most of the respondents disagree with the statement that home buyers are not interested in sustainability features. However, the respondents had different opinions about the attitude of home renters, with the majority of the respondents agreeing or strongly agreeing that home renters are not interested in sustainability features. It is believed that home buyers are more interested in sustainability features compared to home renters, as home buyers are holding the property in the long term and are more concerned about the lifespan and thus capital growth of the property. Most home renters are temporary residents of the property, and their main concern is not necessarily the extra features of the house (other than general), but rather the rental price.

In order to have a greater understanding on the perspectives of real estate agents towards different building information of housing in residential property, the respondents were asked to rate their opinion on five categories of building information. Each category consists of 10 pieces of building information (refer to Table 1). The results of the top 3 building information in each category are showed in Table 2. The mean value showed for each category is the average mean value of the 10 pieces of building information. The ranking of the different building information is based on the mean value of all the features listed in Table 2, from highest to lowest. If two building information have the same mean value, the ranking is determined by the standard deviation.

Table 2: Top 3 Building Information in Each Classification

Building Information		Mean	Std. Dev	Rank
Spatial planning		3.79		
S1	Site area	4.07	0.68	2
S4	Zoning/land use	3.98	0.95	4
S5	Number of bedrooms/bathrooms	3.98	0.68	3
Occupant health and safety		3.42		
H7	Smoke alarms	4.23	0.98	1
H8	Pest control measures	3.87	1.15	6
H9	Building materials	3.85	0.94	7
Occupant comfort		3.40		
C3	Building orientation	3.91	0.84	5
C2	Insulation	3.84	0.95	8
C4	Cross-flow ventilation	3.76	1.04	10
Operation and services		3.19		
O3	Water services connections	3.79	1.00	9
O2	Type of communication/data services connections	3.74	1.11	11
O1	Type of energy services connections	3.57	1.08	15
Building Durability		3.27		
B5	Non-toxic building materials	3.74	1.24	12
B1	Accessible bathroom/toilet	3.63	1.00	13
B9	Kitchen/bathroom materials – lifespan and durability	3.57	0.98	14

As shown in Table 2, across the five categories of building information, real estate agents believed that spatial planning is the most important category in their profession (mean value = 3.79). Closely followed by “Smoke alarms” (H7) is “Site area” (S1), “Number of bedrooms/bathrooms” (S5) and “Zoning/land use” (S4), with the mean value of 4.07 and 3.98 respectively. S1 and S5 with small standard deviation of 0.68 signify the almost similar opinion among the respondents on the importance of these two features. The results revealed that the current property market is more focused on building information related to spatial planning compared to all other categories. The spatial planning category is less related to sustainability of houses. It is mainly focused on the layout and functionality of general property features such as number of bedrooms and bathrooms (Miller et al., 2014), hinting towards less of involvement by real estate agents in promoting sustainability features in residential property. This is further supported by the result of the main features sought by home buyers being number of bedrooms, bathrooms and car spaces (refer to Figure 1). The pest control measures (H8) are important to real estate agents as it will affect the lifespan of the property.

The occupant health and safety is ranked second overall, with a mean value of 3.42, which confirms the need to have housing features which will enhance the health and safety of the occupants. “Smoke alarms” (H7), with a mean value of 4.23, is the most important housing features identified by real estate agents. As smoke alarm is a mandatory requirement in Australian NCC, and houses without this feature cannot be sold, this may be the reason for the highest mean value.

The third most important building category is the occupant’s comfort (mean = 3.40). “Building orientation” (C3), with a mean value of 3.91 and standard deviation of 0.84, also raised considerable amount of concern from real estate agents. The insulation and cross-flow ventilation

are ranked number 8 and 10, respectively. This may be due to the possibility that buyers nowadays are concerned about energy costs and hence a good orientation will help to save electricity costs on air conditioning or heater.

Building durability and operation and services are ranked as the fourth and fifth most important category respectively. Real estate agents may not see the environment and economic impacts of having different sources of energy and water, hence they are not promoting these features. Building durability, which ranked as the fourth important category, is mainly focused on the expected life of the house and components and flexibility. Thus there is a possibility that the real estate agents are not really promoting residential property based on this category. As operation and services focuses on the type of services connection and this may not be a concern of real estate agents, it is reasonable for this category to be listed as the least important category among all five categories.

To further analyse the current residential property market opinion towards sustainability, the respondents were asked to rank the importance of these five categories of building information from three perspectives: as dwelling occupants, as dwelling owners/investors, and as real estate agents, with the Likert scale from “1” being “not at all important” to “5” being “extremely important”. Table 3 shows the ranking of different building categories. This ranking is different from overall ranking from Table 2. Table 3 represents the perspectives of different stakeholders from real estate agents’ point of view while the ranking in Table 2 represents the average mean value of 10 pieces of building information in each category.

Table 3: Ranking of building categories from real estate agents’ perspective and representative of their clients as dwelling occupants and dwelling owners/investors

	Perspective as dwelling occupants			Perspective as dwelling owners/investors			Perspective as real estate agents		
	Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank
Spatial planning	3.93	0.87	2	3.52	1.04	3	3.78	0.87	1
Occupants health and safety	3.81	0.88	4	3.51	0.96	4	3.55	0.97	4
Occupants comfort	3.88	0.82	3	3.47	0.94	5	3.47	0.98	5
Operation and services	4.05	0.93	1	3.79	1.10	2	3.70	1.00	2
Building durability	3.49	0.99	5	3.91	0.97	1	3.57	0.93	3

As shown in Table 3, the mean values from the point of view of dwelling occupants is the highest for four out of five categories of building information compared to the point of view of dwelling owners/investors and real estate agents. It is possible that dwelling occupants are occupying the house and hence they are concerned about the housing features in the category of spatial planning, occupant’s health and safety, occupants comfort, and operation and services. Building durability is not a major concern for them, as most of them might be the tenants of the property and would not occupy the property for a long period of time.

Dwelling owners/investors are more concerned about building durability (mean value = 3.91). This is justified in the literature that building owners or investors would like to own the property in the long term and hence be concerned about the lifespan of the property. This is also supported by the findings which indicated most of the home buyers are concerned about the sustainability features of the residential property (refer to Figure 2). The second highest ranked building category was operation and services, as they are considered as operation costs of the house and cost savings in the electricity and water bills are preferable.

Spatial planning is the most important category from the real estate agents' professional point of view. This may be due to the possibility that the features in spatial planning, such as site area and number of bathrooms, are recorded in most of the real estate database (e.g. CoreLogic RP Data).

There is a discrepancy between ranking of each category from different perspectives, hinting towards the possibility that the features considered important for an occupant and/or owners/investors may not be as important to the real estate agent. Thus there is a high chance that real estate agents are not promoting certain features which may seem important to an occupant. For example, real estate agents ranked operation and services as the most important building category from their perspective as dwelling occupants, but this was ranked as the third most important category from their professional point of view.

The questionnaire results revealed that the property industry agreed that certain sustainability features are important but their main concern is still on the general property features. This indicated that sustainability is not the main concern of real estate agents when compared to the site area and number of bedrooms. However, the site area does influence the sustainability to some extent, in terms of the space of the backyard for social activity such as vegetation or playing area for children. Further calculation of the ratio of house size and site area needs to be carried out to justify this statement for individual property.

5. Conclusion

This paper has provided insights into the perspectives of real estate agents in promoting the sustainability features of residential property. Most of the real estate agents rated themselves with quite substantial knowledge on sustainable housing, and they ranked their clients as slowly gaining interest in sustainable housing. Interestingly, four respondents who rated themselves as having very substantial knowledge on sustainable housing identified a huge growing interest from their clients about sustainability.

Based on the analysis, the dwelling occupiers and dwelling investors/owners have different rankings on the importance on different building categories when compared to the professional point of view of real estate agents. The results showed that real estate agents are more focused on spatial planning, which focuses on general housing features, as opposed to durability or occupants comfort - which is more related to sustainability. However, if they ranked these building categories from the dwelling occupants' or investors' point of view, operation and services, and building durability are considered as the most important building categories.

Thus there is a possibility that dwelling occupants or investors have more interest in the lifespan of the property as this will affect their long term operation cost and return yield respectively. Smoke alarm, site area, zoning/land use and number of bedroom/bathroom are the top four most important features to real estate agents. This raises a further question on whether real estate agents really promote sustainability features during the home buyer's property purchase selection phase. Further research needs to be carried out to interview real estate agents to investigate on the existence of any risks and challenges in promoting sustainable housing.

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